

Recovery Plan Action Status

Plan Name: Owens Basin Wetland and Aquatic Species Recovery Plan, Inyo and Mono Counties, California

Plan Status: Final

Plan Date: 30-Sep-98

Lead Agency: USFWS

Lead Office: Ventura Fish And Wildlife Office

(805)
644-1766)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Owens pupfish (Cyprinodon radiosus)	1	1.1	Maintain existing refuges for Owens pupfish	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Habitat Maintenance and Manipulation	Internal Administrative	
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.1.1	Control non-native species from Fish Slough/build fish barriers	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Management: Predator and Competitor Control	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.1.2	Reestablish native fish assemblage in Fish Slough Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract, Graduate Student, Species Expert	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.1.3	Evaluate livestock grazing practices in Fish Slough Conservation Area	Ongoing Current	FY 2000 - FY 2004		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.1.4	Identify and restore or enhance potentially suitable habitat	Ongoing Current	FY 2000 - FY 2004		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: General	Graduate Student, Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT

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Fish Slough milk-vetch (<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>), Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.1.5	Control off-road vehicles in Fish Slough Conservation Area	Ongoing Current	FY 2000 - FY 2004		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Land Use, Other: Law Enforcement	Internal Administrative, Internal Field Assistance	Coordinate with PVT
Fish Slough milk-vetch (<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>), Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.1.6	Protect spring discharge Fish Slough Conservation Area	Ongoing Not Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Habitat Maintenance and Manipulation	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.12.1	Control non-native species in Blackrock Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Predator and Competitor Control	Contract, Internal Field Assistance, Species Expert	Coordinate with PVT
Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.12.2	Reestablish native fish assemblage in Blackrock Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract, Graduate Student, Species Expert	Coordinate with PVT
Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.12.3	Evaluate livestock grazing in Blackrock Conservation Area	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Land Use, Management: Planning	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	3	2.15.2	Reintroduce Owens tui chubs and Owens speckled dace into Hogback Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract, Graduate Student, Internal Field Assistance, Species Expert	Problem with table in plan
Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>)	2	2.5.1	Control non-native aquatic and plant species/build fish barriers in Warm Springs Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Predator and Competitor Control	Internal Field Assistance, Species Expert, Volunteer	Coordinate with PVT

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Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.5.2	Reestablish native fish assemblage in Warm Springs Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract, Graduate Student, Internal Field Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.5.3	Evaluate livestock grazing in Warm Springs Conservation Area	Ongoing Current	FY 2000 - FY 2004		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Land Use, Management: Planning	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.5.4	Protect spring discharge in Warm Springs Conservation Area	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Habitat Maintenance and Manipulation	Internal Administrative, Internal Field Assistance, Species Expert, Volunteer	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.8.1	Control non-native species in Round Valley Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Predator and Competitor Control	Labor type not yet selected	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.8.2	Reestablish native fish assemblage in Round Valley Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Reintroduction	Contract	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.8.3	Determine water management appropriate for Round Valley Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.8.4	Evaluate livestock grazing in Round Valley Conservation Area	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Land Use, Management: Planning	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT

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Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.8.5	Control off-road vehicles in Round Valley Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Work type not yet selected	Labor type not yet selected	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.9.1	Control non-native species in Southern Owens Conservation Area	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Work type not yet selected	Labor type not yet selected	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.9.3	Evaluate livestock grazing in Southern Owens Conservation area	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	2.9.4	Protect spring discharge in Southern Owens Conservation Area	Unknown	FY 2009		U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Work type not yet selected	Contract	Cartago Springs was acquired by California Department of Fish and Game. A management plan for the Owens pupfish and possibly OTC is being prepared by CDFG with funding from FWS.
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	3.1	Research: Rare species status and distribution studies	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Research: General	Contract	

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Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	3.5	Research: Accumulate information needed to manage for ecosystem integrity	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Research: General	Species Expert	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	4.1	Determine conservation Area boundary criteria	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Management: Planning	Internal Administrative	
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	4.2	Delineate Conservation Area Boundaries	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Management: Planning	Internal Administrative	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	5.1	Prepare management plan for Fish Slough Conservation Area	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	5.12	Prepare management plan for Blackrock Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Species Expert	Coordinate with PVT

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Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	5.5	Prepare management plan for Warm Springs Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Internal Technical Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	5.8	Prepare management plan for Round Valley Conservation	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Management: Planning	Internal Administrative, Internal Technical Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	5.9	Prepare management plan for Southern Owens Conservation Area	Partially Complete			California Department of Fish and Game	Management: Planning	Internal Administrative, Internal Technical Assistance, Species Expert	
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	6.1	Coordinate with Federal and State agencies to implement management plans	Not Started			U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Management: Other, Other	Internal Administrative, Internal Technical Assistance	
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	6.2	Coordinate with private land owners to implement management plans/prepare HCP	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Other: Administration, Other: Information and Education, Other: Regulations	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	7.1	Prepare population and habitat monitoring plans	Partially Complete	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Management: Planning	Internal Administrative	

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Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	7.1.12	Monitor Tier 1 species in Blackrock Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Population Surveys	Graduate Student, Internal Field Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	7.1.5	Monitor rare species in Warm Springs Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Population Surveys	Graduate Student, Internal Field Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	7.1.8	Monitor Tier 1 species in Round Valley Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Population Surveys	Graduate Student, Internal Field Assistance, Species Expert	Coordinate with PVT
Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi)	2	7.1.9	Monitor Tier 1 species in Southern Owens Conservation Area	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game	Research: Population Surveys	Graduate Student, Internal Field Assistance, Species Expert	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	2	7.3	Spring discharge monitoring	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Research: Other Information	Internal Administrative	Coordinate with PVT
Fish Slough milk-vetch (Astragalus lentiginosus var. piscinensis), Owens pupfish (Cyprinodon radiosus), Owens tui chub (Gila bicolor snyderi), Least Bell's vireo (Vireo bellii pusillus)	3	8.1	Recovery information and education program	Ongoing Current	FY 2009	FY 2013	U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Other: Information and Education	Contract	See 3-8.2

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Fish Slough milk-vetch (<i>Astragalus lentiginos</i> var. <i>piscinensis</i>), Owens pupfish (<i>Cyprinodon radiosus</i>), Owens tui chub (<i>Gila bicolor snyderi</i>), Least Bell's vireo (<i>Vireo bellii pusillus</i>)	3	8.2	Public education program to discourage transplantation of non-native species within the Owens Basin	Ongoing Current	FY 2009		U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Endangered Species Division, California Department of Fish and Game, U.S. Forest Service	Other: Information and Education	Contract	Proposal accepted to initiate outreach to local school children and the public on the existence of native fish species in the Owens Valley, their importance, and how they can help them